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Int. Cl.2:

B 60 R 1/02

19 The German Federal Republic
The German Patent Office

DE 26 34 372 A 1

11 **EXPOSITION TEXT** 26 34 372
21 Journal number: P 26 34 372.6
22 Application date: 30th July 1976
43 Exposition date: 2nd February 78

30 Priority of union:
32 33 31

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54 Designation: Rear view mirror for motor vehicles

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Patent claim

1. Rear view mirror for motor vehicles characterized by a mounting (2) attached to the mirror frame (1) and holding a lens (3) and a lamp (4)
2. Rear view mirror according to claim 1. characterized by the lamp being connected to a power source (7) with a switch (6) between the two.
3. Rear view mirror according to claim 1 or 2 characterized by the mounting (2) attached to the mirror frame (1) being adjustable by way of a clamping bolt (9) and a nut (10).
4. Rear view mirror according to claim 3 characterized by a closely fitting tightening yoke (8) being arranged at one end of the clamping bolt (9) and accommodated in the mounting (2).
5. Rear view mirror according to claim 3 or 4 in which both the clamping bolt (9) and the nut (10) are arranged inside the mirror frame (1) and in which a compression spring reaches over the clamping bolt keeping the mounting (2) in place on the tightening yoke (8).

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Rear view mirror for motor vehicles

The invention concerns a rear view mirror for motor vehicles.

Conventional rear view mirrors that are used to remove dead viewing angles or lighten up view shadows are prescribed for most motor vehicles and are placed on the driver's side and often on both sides of the motor vehicle. Conventional external rear view mirrors do not permit the driver any acknowledgement of his own exact position at night. In particular, it is difficult to ensure a clear view backwards on both sides of the motor vehicle at night. It is hard or even

impossible to determine with precision the safety distance to other motor vehicles, to the roadside or to other obstacles at night.

The purpose of the invention is to remedy this deficiency and supply an illuminated rear view mirror to ensure the driver's unobstructed view and the determination of the safety distance, also in dark places.

The invention fulfills this purpose by attaching a mounting with a lens and a lamp to the mirror frame.

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In a further development of the invention, the mounting attached to the mirror frame is adjustable by way of a clamping bolt and a nut. This way, the position of the light source can be changed so as to guarantee the wished result.

The illumination of the rear view mirror that the invention proposes can be placed on the driver's side or on both sides of the motor vehicle.

The invention thus allows a constant monitoring in both forwards and backwards direction of the position and the alignment of the motor vehicle while driving.

In the annexed drawings, an implementation form of the invention is represented according to the following references:

- Fig. 1: a cut through an electrically illuminated rear view mirror,
- Fig. 2: a schematical part representation of a motor vehicle equipped with a rear view mirror according to the invention,
- Fig. 3: a schematical representation of a motor vehicle equipped on both sides with a rear view mirror according to the invention and
- Fig. 4: a cut through a modified implementation form of the invention.

A mirror frame 1 is fastened to the motor vehicle. On the mirror frame 1 is a mounting 2 attached with a lens 3 and an electrical lamp 4 connected to an electrical wire 5. The electrical wire 5 is connected through a switch 6 to a power source 7. A tightening yoke 8 is accommodated in the mounting 2 and is kept firmly in place by a nut 10 screwed onto the clamping bolt 9. Inside the schematically represented motor vehicle 11, the driver's seat 12 can be seen.

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The mirror is held in the mirror frame 1 and covered by a transparent glass pane 13.

The invention designates an electrical light source in connection with an exterior rear view mirror. The lens 3 inside the mounting 2 ensures a light effect. The nut 10 on the clamping bolt 9 can be placed outside or inside the mirror frame 1 and

fastens the tightening yoke 8 firmly inside its accomodation, so that the mounting 2 is fastened thereby. The switch 6 is placed on the instrument panel and governs the electrical connection to power source 7, e.g. a car battery.

The lighting device on the rear view mirror according to the invention permits in this way a bright illumination of both sides of a motor vehicle, when the switch 6 switches on the supply of current to the lamp 4. The rear areas on both sides of the motor vehicles are brightly illuminated and consequently clearly visible. The position and the alignment of the motor vehicle can thus be determined from the driver's seat. A safety distance to other motor vehicles can be kept without difficulty. By reversing the motor vehicle, the driver's safety conditions are substantially improved. Hereby an important contribution to the road safety of the motor vehicle is carried out.

The adjustability of the mounting 2 with the light source with relation to the mirror frame is obtained with the nut 10 and the tightening yoke 8, which will normally be firmly fastened on the inside of the mirror frame. The tightening yoke 8 can, however, be loosened by means of the nut 10, allowing in this manner the mounting 2 to be easily adjusted to a position in which the driver's outlook is completely unhindered and the direction of the lighting device has the position matching exactly the requirements. When this position is obtained, the nut 10 is tightened anew so that the tightening yoke 8 firmly fastens the mounting 2 on the inside of mirror frame 1.

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A modified version of the invention is represented in fig. 4, according to which a compression spring 14 with high spring pressure presses against the tightening yoke, by means of which resetting force is obtained. In this case too, the effect of the illumination of the rear view mirror is of utmost importance for the road safety of the motor vehicle.

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Fig. 1

Fig. 2

Fig. 3

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Fig. 4

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